

Executive Summary

As in many states, communications interoperability between local, state, tribal and federal response communities is a crucial issue. Montana has many challenges to communications interoperability. Some of these challenges relate to simple 'operability' issues, such as the fact that much of Montana's wireless communication infrastructure is between 10 and 30 years old and is based on wide-band, analog technology that is often unreliable and has high maintenance costs. Montana is the nation's fourth largest state and is characterized by large amounts of rural areas and challenging topography, resulting in inadequate radio coverage to ensure responder and public safety. In addition, Montana shares a 550-mile border with Canada, which creates unique law enforcement and public safety agency coordination challenges.

End user units are also aging and have inadequate capability, thus limiting interoperability. Most agencies operate in the VHF band in a conventional mode, relying on simplex mutual aid frequencies for interagency cooperation. Several State of Montana and Federal agencies have parallel statewide systems without standard interoperability. Coordination with Canada is also challenging for spectrum management.

Montana is addressing these challenges with the policy-level Statewide Interoperability Executive Council (SIEC) and a locally-led, operational governing board known as the Interoperability Montana Project Directors (IMPD). The SIEC, formed in July, 2002 and comprised of local, state, federal, and other public service agency representatives, provides policy-level direction in matters related to planning, designing and implementing guidelines, best practices and standard approaches to solve Montana's public safety communications interoperability problems. In August 2005, the SIEC adopted a formal definition of interoperability as well as the technical requirements necessary to meet Project 25 Standards (P25) for the state.

The IMPD is a grassroots partnership of local, tribal, and state government agencies and has the primary responsibility for development and execution of the strategy to implement Interoperability Montana (IM) as defined by the SIEC. Nine consortia in the state represent all 56 counties and 7 Tribal Nations. In addition to the nine consortia project directors, three state agencies have voting positions on the IMPD, representing the Montana Department of Natural Resources and Conservation (DNRC), the Montana Department of Transportation (MDOT) and the Montana Highway Patrol (MHP). Consortia directors represent their local or agency communications needs, yet they are working collaboratively to build a shared system that will improve the safety of residents and first responders. The IMPD has formed sub-committees to define a structure to address short- and long-term maintenance and governance of the IM system as well as to design and implement infrastructure and technical solutions.

With over 1400 users having already converted to a P25 trunked/hybrid configuration, Montana is well on its way to improving the reliability of radio transmission sites, developing trunked radio coverage for use by partners, developing a digital microwave system to connect sites, and providing backbone infrastructure to allow for the future expansion of technologies such as mobile data, remote sensing and data transmission for public entities. The success of this project will open up numerous voice and data opportunities for public safety jurisdictions across the state. No person shall lose his/her life because public safety officials can not communicate.

